SEQUENCE LISTING

- (1) GENERAL INFORMATION:
 - (i) APPLICANT: Lal, Preeti Guegler, Karl J.

Corley, Neil C.

- (ii) TITLE OF INVENTION: PROSTATE GROWTH-ASSOCIATED MEMBRANE PROTEINS
- (iii) NUMBER OF SEQUENCES: 7
- (iv) CORRESPONDENCE ADDRESS:
 - (A) ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
 - (B) STREET: 3174 PORTER DRIVE
 - (C) CITY: PALO ALTO
 - (D) STATE: CALIFORNIA
 - (E) COUNTRY: USA
 - (F) ZIP: 94304
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy disk
 - (B) COMPUTER: IBM PC compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER: To Be Assigned
 - (B) FILING DATE: Herewith
 - (C) CLASSIFICATION:
- (viii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: CERRONE, MICHAEL C.
 - (B) REGISTRATION NUMBER: 39,132
 - (C) REFERENCE/DOCKET NUMBER: PF-0527 US
 - (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: (650) 855-0555
 - (B) TELEFAX: (650) 845-4166
- (2) INFORMATION FOR SEQ ID NO:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 141 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (vii) IMMEDIATE SOURCE:
 - (A) LIBRARY: PROSTUT10
 - (B) CLONE: 1691243

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

Met Val His Val Ala Tyr Ser Leu Cys Leu Pro Met Arg Arg Ser Glu Arg Tyr Leu Phe Leu Asn Met Ala Tyr Gln Gln Val His Ala Asn Ile Glu Asn Ser Trp Asn Glu Glu Val Trp Arg Ile Glu Met Tyr Ile Ser Phe Gly Ile Met Ser Leu Gly Leu Leu Ser Leu 55 Leu Ala Val Thr Ser Ile Pro Ser Val Ser Asn Ala Leu Asn Trp 65 70 Arg Glu Phe Ser Phe Ile Gln Ser Thr Leu Gly Tyr Val Ala Leu 80 85 Leu Ile Ser Thr Phe His Val Leu Ile Tyr Gly Trp Lys Arg Ala 100 95 Phe Glu Glu Glu Tyr Tyr Arg Phe Tyr Thr Pro Pro Asn Phe Val 110 115 Leu Ala Leu Val Leu Pro Ser Ile Val Ile Leu Asp Leu Leu Gln 125 130 Leu Cys Arg Tyr Pro Asp

(2) INFORMATION FOR SEQ ID NO:

- 2:
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 410 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: BRSTTUT03
- (B) CLONE: 1999442

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

Met Phe Leu Pro Pro Val Val Leu Ala Ile Arg Ser Arg Tyr Val 10 Leu Glu Ala Ala Val Tyr Thr Phe Thr Met Phe Phe Ser Thr Phe 20 25 Tyr His Ala Cys Asp Gln Pro Gly Ile Val Val Phe Cys Ile Met 35 40 Asp Tyr Asp Val Leu Gln Phe Cys Asp Phe Leu Gly Ser Leu Met 50 55 Ser Val Trp Val Thr Val Ile Ala Met Ala Arg Leu Gln Pro Val 65 70 Val Lys Gln Val Leu Tyr Leu Leu Gly Ala Met Leu Leu Ser Met 80 85 Ala Leu Gln Leu Asp Arg His Gly Leu Trp Asn Leu Leu Gly Pro 95 100 Ser Leu Phe Ala Leu Gly Ile Leu Ala Thr Ala Trp Thr Val Arg 110 115 Ser Val Arg Arg Arg His Cys Tyr Pro Pro Thr Trp Arg Arg Trp 125 130 Leu Phe Tyr Leu Cys Pro Gly Ser Leu Ile Ala Gly Ser Ala Val 140 145 Leu Leu Tyr Ala Phe Val Glu Thr Arg Asp Asn Tyr Phe Tyr Ile

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155
                                     160
                                                         165
His Ser Ile Trp His Met Leu Ile Ala Gly Ser Val Gly Phe Leu
                170
                                     175
Leu Pro Pro Arg Ala Lys Thr Asp His Gly Val Pro Ser Gly Ala
                                     190
Arg Ala Arg Gly Cys Gly Tyr Gln Leu Cys Ile Asn Glu Gln Glu
                200
                                     205
Glu Pro Gly Pro Arg Gly Pro Arg Gly His Cys Gln Gln His
                215
                                     220
Leu Cys Gln Leu Arg Gly Ala Leu Gly Leu Ala Leu Arg Gly Tyr
                                                         240
                230
                                     235
Glu Cys Phe Leu Glu Phe Phe Leu Gly Val Trp Ser Pro Leu Arg
                                     250
                245
Arg Arg Gln Ala Val Phe Leu Glu Asp Met Glu Ser Phe Ser Arg
                260
                                     265
                                                         270
Thr Gln Asn Ser Ser Arg Asp Leu Glu Pro Phe Pro Gly His Gly
                275
                                     280
Glu Leu Pro Glu Gly Leu Glu Ser Pro Cys Ile Met Glu Ser Phe
                290
                                     295
                                                         300
Leu Arg Thr Gly Ala Tyr Ala Gly Thr Glu Ser Leu Arg Thr Lys
                305
                                     310
Glu Ser Leu Leu Gln Val Trp Ser Leu Ser Trp Asp Ala Glu Pro
                320
                                     325
                                                         330
Ser Gln Asp Met Asp Ser Phe Pro Gly Arg Gln Ser Pro Val Arg
                335
                                     340
Ser Thr Ala Ser Phe Gln Arg Arg Trp Ser Leu Ser Trp Gly Asn
                350
                                     355
Gln Ile Ser Arg Phe Ser Gln Arg Leu Ser Asn Ser Gly Leu Arg
                                     370
                365
Leu Pro Ser Gln Arg Gln Arg Leu Gly Cys Ala Val Leu Trp Arg
                                     385
                380
                                                         390
Arg Asp Cys Arg Met Asp Gly Ala Gly Thr Gly Ala Val Trp Val
                395
                                     400
Ala Gly Ile Leu Val
                410
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(2) INFORMATION FOR SEQ ID NO:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1213 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: PROSTUT10
- (B) CLONE: 1691243
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

CAAGTATAGG	AGATTTCCAC	CTTGGTTGGA	AACCTGGTTA	CAGTGTAGAA	AACAGCTTGG	60
ATTACTAAGT	TTTTTCTTCG	CTATGGTCCA	TGTTGCCTAC	AGCCTCTGCT	TACCGATGAG	120
AAGGTCAGAG	AGATATTTGT	TTCTCAACAT	GGCTTATCAG	CAGGTTCATG	CAAATATTGA	180
AAACTCTTGG	AATGAGGAAG	AAGTTTGGAG	AATTGAAATG	TATATCTCCT	TTGGCATAAT	240
GAGCCTTGGC	TTACTTTCCC	TCCTGGCAGT	CACTTCTATC	CCTTCAGTGA	GCAATGCTTT	300
AAACTGGAGA	GAATTCAGTT	TTATTCAGTC	TACACTTGGA	TATGTCGCTC	TGCTCATAAG	360
TACTTTCCAT	GTTTTAATTT	ATGGATGGAA	ACGAGCTTTT	GAGGAAGAGT	ACTACAGATT	420
TTATACACCA	CCAAACTTTG	TTCTTGCTCT	TGTTTTGCCC	TCAATTGTAA	TTCTGGATCT	480

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TTTGCAGCTTTGCAGATACCCAGACTGAGCTGGAACTGGAATTTGTCTTCTATTGACTC540TACTTCTTTAAAAGCGGCTGCCCATTACATTCCTCAGCTGTCCTTGCAGTTAGGTGTACA600TGTGACTGAGTGTTGGCCAGTGAGATGAAGTCTCCTCAAAGGAAGGCAGCATGTGTCCTT660TTTCATCCCTTCATCTTGCTGCTGGGATTGTGGATATAACAGGAGCCCTGGCAGCTGTCT720CCAGAGGATCAAAGCCACACCCAAAGAGTAAGGCAGATTAGAGACCAGAAAGACCTTGAC780TACTTCCCTACTTCCACTGCTTTTTCCTGCATTTAAGCCATTGTAAATCTGGGTGTGTTA840CATGAAGTGAAAATTAATTCTTTCTGCCCTTCAGTTCTTTATCCTGATACCATTTAACAC900TGTCTGAATTAACTAGACTGCAATAATTCTTTCTTTTGAAAGCTTTTAAAAGCTTTAAA960CAATTCACATTTAAAATTGATTTTCCATTGTCAATTAGTTATACTCATTTTCCTGCCTTGA1020TCTTTCATTAGATATTTTGTATCTGCTTGAAATATATTATCTTCTTTTTAACCCATGTTT1140TCTATCATTCTCATAGATCTGCCTTATAAACATTTAAATAAAAAGTACTATTTAATGATT1200TAAAAAAAAAAAAAAACATTTAAATAAAAAGTACTATTTAATGATT1213
```

- (2) INFORMATION FOR SEQ ID NO:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1297 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (vii) IMMEDIATE SOURCE:
 - (A) LIBRARY: BRSTTUT03
 - (B) CLONE: 1999442
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

CGGACGCGTG	$\tt GGCTGCTCTG$	CCTGAGCAAC	CTCATGTTTC	TGCCACCTGT	GGTCCTGGCC	60
ATTCGGAGTC	GATATGTGCT	GGAAGCTGCA	GTCTACACCT	TCACCATGTT	CTTCTCCACG	120
TTCTATCATG	CCTGTGACCA	GCCAGGCATC	GTGGTTTTCT	GCATCATGGA	CTACGATGTG	180
CTGCAGTTCT	GTGATTTCCT	GGGCTCCTTA	ATGTCCGTGT	GGGTCACTGT	CATTGCCATG	240
GCTCGTTTAC	AGCCCGTGGT	CAAGCAGGTG	CTGTATTTGC	TGGGAGCTAT	GCTGCTGTCC	300
ATGGCTCTGC	AGCTTGACCG	ACATGGACTC	TGGAACCTGC	TTGGACCCAG	TCTCTTCGCC	360
CTGGGGATCT	TGGCCACAGC	CTGGACAGTA	CGCAGCGTCC	GCCGCCGGCA	CTGCTACCCA	420
CCCACGTGGC	GCCGCTGGCT	TTTCTACTTG	TGCCCTGGCA	GCCTTATTGC	AGGCAGTGCC	480
GTCCTGCTTT	ATGCTTTTGT	GGAGACCCGG	${\tt GACAACTACT}$	TCTACATTCA	CAGCATTTGG	540
CATATGCTCA	TTGCGGGCAG	TGTGGGCTTC	CTGCTGCCCC	CTCGTGCCAA	GACTGACCAC	600
GGGGTCCCAT	CTGGAGCCCG	GGCCCGGGGC	TGTGGTTACC	AGCTATGCAT	CAACGAGCAG	660
GAGGAGCCTG	GGCCTCGTGG	GCCCAGGAGG	${\tt GGCCACTGTC}$	AGCAGCATCT	GTGCCAGCTG	720
AGAGGGGCTT	TGGGCCTGGC	CCTGAGGGGA	TATGAATGCT	TCCTAGAGTT	CTTTCTGGGG	780
GTGTGGAGCC	CTCTTAGAAG	GAGACAGGCT	GTATTTCTTG	AGGACATGGA	GTCTTTCTCA	840
AGGACACAAA	ACTCTTCCAG	GGACCTGGAG	CCCTTCCCAG	GACATGGAGA	ACTTCCTGAG	900
GGCCTGGAGT	CCCCCTGCAT	CATGGAGTCC	TTCTTAAGGA	CTGGAGCCTA	TGCAGGCACA	960
GAGTCCCTCA	GGACCAAGGA	GTCCCTCCTG	CAGGTGTGGA	GCCTTTCCTG	GGATGCAGAG	1020
CCTTCCCAAG	ACATGGATTC	CTTCCCAGGG	AGACAAAGCC	CTGTCAGGAG	CACAGCATCT	1080
TTCCAGAGGA	GGTGGAGTCT	ATCTTGGGGA	AACCAAATTT	CCAGATTTTC	CCAGAGGCTC	1140
AGCAACTCTG	GCCTCAGGCT	TCCTTCCCAG	AGGCAGCGTC	TGGGCTGTGC	TGTGCTGTGG	1200
AGGAGGGATT	GCAGGATGGA	TGGAGCTGGG	ACTGGGGCTG	TCTGGGTGGC	TGGTATCCTC	1260
GTTTGATACA	GGTGGAGTCT	CTGTGTCTCC	ATAGAAG			1297

- (2) INFORMATION FOR SEQ ID NO:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 76 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: GenBank
- (B) CLONE: 1216498

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

Met Gly Arg Ala Met Val Val Arg Leu Gly Leu Gly Leu Leu 10 Leu Ala Leu Leu Pro Thr Gln Ile Tyr Cys Asn Gln Thr Ser 20 25 Val Ala Pro Phe Ser Gly Asn Gln Ser Ile Ser Ala Ala Pro Asn 35 40 Pro Thr Asn Ala Thr Thr Arg Ser Gly Cys Ser Ser Leu Gln Ser 55 50 Thr Ala Gly Leu Leu Ala Leu Ser Leu Ser Leu Leu His Leu Tyr 70 75 65 Cys

(2) INFORMATION FOR SEQ ID NO:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 261 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: GenBank
- (B) CLONE: 130989

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

				_	_			_			_	_		_
Met	Trp	Val	Pro	Val 5	Val	Phe	Leu	Thr	Leu 10	Ser	Val	Thr	Trp	Ile 15
Gly	Ala	Ala	Pro	Leu 20	Ile	Leu	Ser	Arg	Ile 25	Val	Gly	Gly	Trp	Glu 30
Cys	Glu	Lys	His	Ser 35	Gln	Pro	Trp	Gln	Val 40	Leu	Va1	Ala	Ser	Arg 45
Gly	Arg	Ala	Val	Cys 50	Gly	Gly	Val	Leu	Val 55	His	Pro	Gln	Trp	Val 60
Leu	Thr	Ala	Ala	His 65	Cys	Ile	Arg	Asn	Lys 70	Ser	Val	Ile	Leu	Leu 75
Gly	Arg	His	Ser	Leu 80	Phe	His	Pro	Glu	Asp 85	Thr	Gly	Gln	Val	Phe 90
Gln	Val	Ser	His	Ser 95	Phe	Pro	His	Pro	Leu 100	Tyr	Asp	Met	Ser	Leu 105
Leu	Lys	Asn	Arg	Phe 110	Leu	Arg	Pro	Gly	Asp 115	Asp	Ser	Ser	His	Asp 120
Leu	Met	Leu	Leu	Arg 125	Leu	Ser	Glu	Pro	Ala 130	Glu	Leu	Thr	Asp	Ala 135
Val	Lys	Val	Met	Asp 140	Leu	Pro	Thr	Gln	Glu 145	Pro	Ala	Leu	Gly	Thr 150
Thr	Cys	Tyr	Ala	Ser 155	Gly	Trp	Gly	Ser	Ile 160	Glu	Pro	Glu	Glu	Phe 165
Leu	Thr	Pro	Lys	Lys 170	Leu	Gln	Cys	Val	Asp 175	Leu	His	Val	Ile	Ser 180
Asn	Asp	Val	Cys	Ala 185	Gln	Val	His	Pro	Gln 190	Lys	Val	Thr	Lys	Phe 195

Met Leu Cys Ala Gly Arg Trp Thr Gly Gly Lys Ser Thr Cys Ser 200 205 Gly Asp Ser Gly Gly Pro Leu Val Cys Asn Gly Val Leu Gln Gly 215 220 225 Ile Thr Ser Trp Gly Ser Glu Pro Cys Ala Leu Pro Glu Arg Pro 230 235 240 Ser Leu Tyr Thr Lys Val Val His Tyr Arg Lys Trp Ile Lys Asp 245 250 Thr Ile Val Ala Asn Pro 260

(2) INFORMATION FOR SEQ ID NO:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1317 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: GenBank
- (B) CLONE: 2459993

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

Met	Leu	Ala	Cys	Leu 5	Cys	Cys	Lys	Lys	Gly 10	Gly	Ile	Gly	Phe	Lys 15
Glu	Phe	Glu	Asn	Ala 20	Glu	Gly	Asp	Glu	Tyr 25	Val	Ala	Asp	Phe	Ser 30
Glu	Gln	Gly	Ser	Pro 35	Ala	Ala	Ala	Ala	Gln 40	Thr	Gly	Pro	Asp	Val 45
Tyr	Val	Leu	Pro	Leu 50	Thr	Glu	Val	Ser	Leu 55	Pro	Met	Ala	Lys	Gln 60
Pro	Gly	Arg	Ser	Val 65	Gln	Leu	Leu	Lys	Ser 70	Thr	Asp	Leu	Gly	Arg 75
His	Ser	Leu	Leu	Tyr 80	Leu	Lys	Glu	Ile	Gly 85	His	Gly	Trp	Phe	Gly 90
Lys	Val	Phe	Leu	Gly 95	Glu	Val	His	Ser	Gly 100	Val	Ser	Gly	Thr	Gln 105
Va1	Val	Val	Lys	Glu 110	Leu	Lys	Val	Ser	Ala 115	Ser	Val	Gln	Glu	Gln 120
Met	Gln	Phe	Leu	Glu 125	Glu	Ala	Gln	Pro	Tyr 130	Arg	Ala	Leu	Gln	His 135
Ser	Asn	Leu	Leu	Gln 140	Cys	Leu	Ala	Gln	Cys 145	Ala	Glu	Val	Thr	Pro 150
Tyr	Leu	Leu	Val	Met 155	Glu	Phe	Cys	Pro	Leu 160	Gly	Asp	Leu	Lys	Gly 165
Tyr	Leu	Arg	Ser	Cys 170	Arg	Val	Thr	Glu	Ser 175	Met	Ala	Pro	Asp	Pro 180
Leu	Thr	Leu	Gln	Arg 185	Met	Ala	Cys	Glu	Val 190	Ala	Cys	Gly	Val	Leu 195
His	Leu	His	Arg	His 200	Asn	Tyr	Val	His	Ser 205	Asp	Leu	Ala	Leu	Arg 210
Asn	Cys	Leu	Leu	Thr 215	Ala	Asp	Leu	Thr	Val 220	Lys	Val	Gly	Asp	Tyr 225
Gly	Leu	Ser	His	Cys 230	Lys	Tyr	Arg	Glu	Asp 235	Tyr	Leu	Val	Thr	Ala 240
Asp	Gln	Leu	${\tt Trp}$	Val	Pro	Leu	Arg	Trp	Ile	Ala	Pro	Glu	Leu	Val

				245					250					255
Asp	Glu	Val	His	245 Gly 260	Asn	Leu	Leu	Val	250 Val 265	Asp	Gln	Thr	Lys	255 Ser 270
Ser	Asn	Val	Trp		Leu	Gly	Val	Thr		Trp	Glu	Leu	Phe	
Leu	Gly	Ala	Gln		Tyr	Pro	Gln	His		Asp	Arg	Gln	Val	
Ala	Tyr	Ala	Val		Glu	Gln	Gln	Leu		Leu	Pro	Lys	Pro	
Leu	Gln	Leu	Ala		Ser	Asp	Arg	Trp		Glu	Val	Met	Gln	
Cys	Trp	Leu	Gln		Glu	Gln	Arg	Pro	Thr	Ala	Glu	Glu	Val	
Leu	Leu	Leu	Ser		Leu	Cys	Ala	Lys		Thr	Thr	Glu	Leu	
Glu	Glu	Phe	Glu	Arg 365	Arg	Trp	Arg	Ser	Leu 370	Arg	Pro	Gly	Gly	Ser 375
Thr	Gly	Leu	Gly	Ser 380	Gly	Ser	Ala	Ala	Pro 385	Ala	Ala	Ala	Thr	Ala 390
Ala	Ser	Ala	Glu	Leu 395	Thr	Ala	Ala	Ser	Ser 400	Phe	Pro	Leu	Leu	Glu 405
Arg	Phe	Thr	Ser	Asp 410	Gly	Phe	His	Val	Asp 415	Ser	Asp	Asp	Val	Leu 420
Thr	Val	Thr	Glu	Thr 425	Ser	His	Gly	Leu	Asn 430	Phe	Glu	Tyr	Lys	Trp 435
Glu	Ala	Gly	Cys	Gly 440	Ala	Glu	Glu	Tyr	Pro 445	Pro	Ser	Gly	Ala	Ala 450
Ser	Ser	Pro	Gly	Ser 455	Ala	Ala	Arg	Leu	Gln 460	Glu	Leu	Cys	Ala	Pro 465
Asp	Ser	Ser	Pro	Pro 470	Gly	Val	Val	Pro	Val 475	Leu	Ser	Ala	His	Ser 480
Pro	Ser	Val	Gly	Ser 485	Glu	Tyr	Phe	Ile	Arg 490	Leu	Glu	Gly	Ala	Val 495
			_	500	-		_	Cys	505	_	_			510
Pro	Gln	Ala	Val	Thr 515	Asp	Gln	Asp	Asn	Asn 520	Ser	Glu	Glu	Ser	Thr 525
				530				Leu	535	_				540
		_		545				Asp	550				_	555
	_			560				Ser	565			_		570
				575				Trp	580					585
				590	_			Gly	595				-	600
				605				Asp	610					615
				620				Gly	625					630
				635				Arg	640				_	645
				650				Asp	655					660
				665			_	Ala	670				_	675
				680				Asp	685					690
Ala	Val	Ser	Pro	Gly 695	GIn	GLu	Pro	Ser	Arg 700	Pro	Phe	Asn	Leu	Leu 705

Pro Leu Cys Pro Ala Lys Gly Leu Ala Pro Ala Ala Cys Leu Ile Thr Ser Pro Trp Thr Glu Gly Ala Val Gly Gly Ala Glu Asn Pro Ile Val Glu Pro Lys Leu Ala Glu Glu Ala Glu Gly Ser Ala Glu Pro Gln Leu Pro Leu Pro Ser Val Pro Ser Pro Ser Cys Glu Gly Ala Ser Leu Pro Ser Glu Glu Ala Ser Ala Pro Asp Ile Leu Pro Ala Ser Pro Thr Pro Ala Ala Gly Ser Trp Val Thr Val Pro Glu Pro Ala Pro Thr Leu Glu Ser Ser Gly Ser Ser Leu Gly Gln Glu Ala Pro Ser Ser Glu Asp Glu Asp Thr Thr Glu Ala Thr Ser Gly Val Phe Thr Asp Leu Ser Ser Asp Gly Pro His Thr Glu Lys Ser Gly Ile Val Pro Ala Leu Arg Ser Leu Gln Lys Gln Val Gly Thr Pro Asp Ser Leu Asp Ser Leu Asp Ile Pro Ser Ser Ala Ser Asp Gly Gly Cys Glu Val Leu Ser Pro Ser Ala Ala Gly Pro Pro Gly Gly Gln Pro Arg Ala Val Asp Ser Gly Tyr Asp Thr Glu Asn Tyr Glu Ser Pro Glu Phe Val Leu Lys Glu Ala His Glu Ser Ser Glu Pro Glu Ala Phe Gly Glu Pro Ala Ser Glu Gly Glu Ser Pro Gly Pro Asp Pro Leu Leu Ser Val Ser Leu Gly Gly Leu Ser Lys Ser Pro Tyr Arg Asp Ser Ala Tyr Phe Ser Asp Leu Asp Ala Glu Ser Glu Pro Thr Phe Gly Pro Glu Lys His Ser Gly Ile Gln Asp Ser Gln Lys Glu Gln Asp Leu Arg Ser Pro Pro Ser Pro Gly His Gln Ser Val Gln Ala Phe Pro Arg Ser Ala Val Ser Ser Glu Val Leu Ser Pro Pro Gln Gln Ser Glu Glu Pro Leu Pro Glu Val Pro Arg Pro Glu Pro Leu Gly Ala Gln Gly Pro Val Gly Val Gln Pro Val Pro Gly Pro Ser His Ser Lys Cys Phe Pro Leu Thr Ser Val Pro Leu Ile Ser Glu Gly Ser Gly Thr Glu Pro Gln Gly Pro Ser Gly Gln Leu Ser Gly Arg Ala Gln Gln Gly Gln Met Gly Asn Pro Ser Thr Pro Arg Ser Pro Leu Cys Leu Ala Leu Pro Gly His Pro Gly Ala Leu Glu Gly Arg Pro Glu Glu Asp Glu Asp Thr Glu Asp Ser Glu Glu Ser Asp Glu Glu Leu Arg Cys Tyr Ser Val Glu Glu Pro Ser Glu Asp Ser Glu Glu Glu Pro Pro Ala Val Pro Val Val Val Ala Glu Ser Gln Ser Ala Arg Asn Leu Arg Ser Leu Leu Lys Met Pro Ser Leu Leu Ser Glu Ala Phe Cys Asp Asp Leu Glu Arg

	1160	1165		1170
Lys Lys Lys	Ala Val Ser 1175	Phe Phe Asp Asp 1180	•	yr Leu 1185
Phe Asp Gln		Thr Arg Glu Thr 1195	Gly Glu Pro Pl	he Pro 1200
Ser Thr Lys	Glu Ser Leu 1205	Pro Thr Phe Leu 1210		ro Ser 1215
Ser Pro Ser	Ala Thr Gly 1220	Leu Pro Leu Arg 1225	Ala Gly His Se	er Pro 1230
Asp Ser Ser		Pro Gly Ser Arg 1240	-	sp Gly 1245
Asp Phe Pro	Leu Val Pro 1250	Gly Lys Ala Ala 1255	Leu Val Thr G	lu Leu 1260
Asp Pro Ala	_	Leu Ala Ala Pro 1270	Pro Thr Pro A	la Ala 1275
Pro Phe Ser	Arg Phe Thr 1280	Val Ser Pro Thr 1285	Pro Ala Ser A	rg Phe 1290
Ser Ile Thr	His Ile Ser 1295	Asp Ser Asp Ala 1300	Gln Ser Val G	ly Gly 1305
Pro Ala Ala	Gly Ala Gly	Gly Arg Tyr Thr	Glu Ala	

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